### **Community Development Activities and Issues**

# Guam Department of Agriculture, Division of Aquatic and Wildlife Resources

## Piti Pride Tepungan Wide – Campaign for Sustainable Practices

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By

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### **INTRODUCTION:**

Guam, a territory of the U.S. since the Spanish American War of the 1800's, is located in the Western Pacific, the southernmost island of the Mariana Archipelago. It has a population of 160,378 residents according to a July 2013 demographics profile, composed of Chamorros (37.1%), Filipinos (26.3%), Pacific Islander (11.3%), White (6.9%), and other ethnic groups (http://www.indexmundi.com/guam/demographics\_profile.html).

Piti is one of 22 villages on Guam, located in the Tepungan Bay, which means a "place by the water" in Chamorro, and contains the Piti Bomb Holes Preserve. This area is commonly known as the "Fish Eye Park" because of the underwater observatory that was built there about 10 years ago. However, residents would like to refer to the preserve by its original Chamorro name, *Tepungan*, in efforts to retain Guam's cultural heritage and village pride.

Piti Bay is famous for its "bomb-holes", which are sinkholes created by collapsed caves. These holes have filled with seawater and sand over time and have become populated by fishes, corals, and other marine invertebrates. The largest sinkhole, Piti Bomb-Hole, is a very popular dive and snorkeling spot home to about 200 species of fishes and a variety of marine invertebrates. (http://coris.noaa.gov/about/eco\_essays/guam/mpa.html).

Additionally, this preserve is open to teach seasonal fishing for juveniles such as Mackerel (Atulai), Scribbled Rabbit Fish (Manahak), and Fusiliers (Achemson). Other marine users to this preserve are first time and regular divers, snorkelers, swimmers, and until recently paddlers. While there are other threats to the fish habitats, such as sedimentation and soil erosion as well as pollution and littering, human use impacts are addressed within this scope of work.

The purpose of this campaign is to promote sustainable practices in the Piti Bomb Holes Preserve in the village of Piti.

#### **METHODS**

Campaign research began in 2012 from a Research Plan based on collected information about the Piti Bomb Holes Preserve. With the Research Plan, a "Theory of Change" was formulated to guide the campaign using "SMART" objectives. Then, current perspectives about the preserve were addressed using qualitative and quantitative surveys. Qualitative information was obtained by individual in-depth interviews with three fishers and three resource users, such as paddlers, swimmers, and divers to preserves to collect knowledge, attitude, and practice questions. The interviews consisted of each individual answering a series of open-ended questions regarding what they thought about recreational activities in the preserve. General normal distribution of responses determined general patterns of perception of the Tepungan area. Additionally, from those interviews, two focus groups were formed with 4 fishers and 5 resource users respectively to develop a campaign "Knowledge, Attitude, and Practice" (KAP) survey that was conducted to 207 participants in April-May 2013 to capture quantitative data about resource management of the preserve. The KAP survey results analyzed percentages of responders of the sample and their readiness to behavior change when using the preserve. As the percentages were compared to the stages of a behavior change continuum, alignment to the campaign's "Theory of Change" was an important step to guide subsequent campaign decisions, such as how much time would be allotted to educational awareness (27%, n=100 at the pre-contemplation to change stage) versus developing public outreach activities (59%, n=100 at the Preparation to change stage). With this information, our campaign has proceeded to develop service learning projects for the general public to participate in to spread the campaign messages.

Additionally, to develop and implement the "Piti Pride Tepungan Wide" campaign which launched September 2013 social marketing techniques were used to target specific audiences in Guam's populations. These techniques were to develop separate marketing plans for the target audiences, community mobilization, and key influencer groups to Piti. Each plan consists of the product, price, promotion, place, and positioning of messaging and activities within three phases of a timeline along with the costs for those items identified.

### PRELIMINARY RESULTS AND DISCUSSION

In-depth interviews indicated a concern for better resource management through the topic, "What does your target audience perceive as the benefit in carrying out the new behavior (s)? 67%, n=6 Respondents replied that changing behavior in the preserves would benefit all users and the environment. However, one fisher stated that preserves do not benefit fishers, and one resource user stated that all preserves are doing well except Piti because of all the activity there. The Fishers focus group discussions (n=4) revealed support of protecting and maintaining the health of fish habitats because it would teach respect to the resources, one fisher added that if one tour operator or recreational user would get caught then that would be a good example to others to learn and follow rules. Of the Resource Users focus group (n=5), respondents feel that everyone would benefit, especially children in the long run, but one resource user feels that a long-term

plan is hard for our generation due to the need for instant gratification. In addition, KAP results helped to develop the campaign look and feel through social marketing development such as the campaign logo, slogan, mascot, and messaging to a variety of audiences aligned to "SMART" objectives and funding constraints.

**Campaign Presentations** – In an effort to promote the Piti Pride Campaign, all campaign presentations include the location of the preserve, benefits of a preserve, and an explanation of the Chamorro name of the preserve area, Tepungan. The benefits of the preserve include the abundance of fish life and a healthy reef. The healthy productivity of the reef translates into fish spillover.

As a result of the research plan, the various threats to fish habitats that include sedimentation and soil erosion, pollution and litter, and human use issues such as walking through sea grass beds and damaging coral reef was identified. These findings are presented along with highlights of the campaign mascot, "Piti Pete", who is an Orange Spine Unicorn Fish (*Naso lituratus*). This fish is found in Tepungan, and is being used to portray life on the coral reef. Furthermore, the mascot represents the special characteristics and need for a healthy environment to continue to thrive.

Campaign Call to Action - "Piti Pride Tepungan Wide" has a "Call to Action", which is what the communities will do for the campaign, the action that we are asking. The action or tagline is "Our Piti. Our Pride. Our Pledge to Protect. Text (688-DAWR 3297)." This phone number offers communities an opportunity to participate in the campaign. When communities take pride in their village of Piti, they are more willing to support maintaining healthy fish habitats for their families and for the future. They will encourage others to be good stewards of the resources in the preserve. The residents also will know that the location extends from the Tepungan Bay, passing the Tepungan Beach, and ending past the Tepungan Channel. The text number is used for collecting information such as activities that are happening in the preserves, day or night, and if those activities are positive or negative impacts to the fish habitat. Also, we encourage communities such as park vendors, park businesses, and park visitors at Tepungan Bay Beach Park to use sustainable practices in and out of the water. They may use the text number to report pollution, damage to fish habitat, and other concerns. Resource Users at the other end of the preserve may use the text number to report dangerous activities or hazardous marine debris they see when they are practicing their marine sports. Fishers and residents may text to report what they see along the shoreline and around their homes that affect fish habitat such as unsustainable practices or large events of soil erosion.

Next Steps – After the campaign implementation phase from September 2013 to July 2014, a campaign evaluation will be conducted and reported. With the analysis, results will be shared among partner agencies and organizations. Further planning will be completed for a required Sustainability Plan for our division which may include an extension of the campaign in Piti,

broadening the campaign for other preserves, or developing other actions to complement the campaign which will be determined by division review and funding approval.

**Funding Sources** – The U.S. Department of Interior, U.S. Fish and Wildlife Service, Sport Fish Restoration grant, allows for the MPA campaign project. The Micronesia Conservation Trust (NGO) and Rare (NGO) offer Communications in Conservation campaign training to the Resource Information and Education Officer (RIEO) at the Division of Aquatic and Wildlife Resources. The University of Guam Sea Grant funds RIEO's salary for training by Rare.

Respective websites –

- 1) Division of Aquatic and Wildlife Resources www.dawr.guam.gov
- 2) Rare <u>www.rare.org</u>
- 3) UOG Sea Grant <a href="http://www.uog.edu/sea-grant/uog-sea-grant-home">http://www.uog.edu/sea-grant/uog-sea-grant-home</a>